# Bulletin

March 1983

President: Neil Kaltman, K6SMF □ Vice President: Joe Locascio, K5KT Treasurer: Don Moses, W6UY □ Secretary: Jan Perkins, N6AW Directors: Jim Stevenson, KM6B; Don Bostrom, N6IC; Jim Rafferty, N6RJ; Bob Cobb, W6CN (membership): Mike Hudgens. W6YO (bulletin)

**Next meeting:** Thursday, March 10, 1983, at 7:30 PM in the DWP Cafeteria, 111 Hope Street Jack Hollander, N6UC, has a program on Australia; in addition, the Cook Island slides of Victor Rivera, ZK1CG, will be shown.

# A contester's evaluation of the Kenwood TS930S

By John Yodis, K2VV

The move to a TS930S seemed the logical step up from a TS830S/VFO230 combination. The added digital gimmickry, new advances in receiver design and no tuneup finals seemed irresistible. The 930S, however, has a number of quirks that, as a previous 830S owner, I find annoying and have not yet gotten used to. Most of these probably wouldn't bother anyone other than a contester.

Some versatility was lost in attempting to combine transceive and remote VFO into one package. A second digital readout for the second VFO would help immensely in working 40-meter phone DX. When setting up for split operation the *TF* (transmit frequency set) button allows (or forces, depending on your point of view) you to hear on your transmit frequency. This means you might miss either the DX station saying over or, if you wait until he does, you'll still be

setting your transmit frequency while others have started calling.

The 930S has no XIT (transmitter offset). 830S owners have been spoiled by being the first ones through when a DX station says *up two*. Going up two with the 930S is a four-step operation.

The RIT is digitally encoded and can be reset to zero with the RIT CLEAR button. The RIT cannot be cleared, however, when the rig is in transmit mode. If you have just finished with HA3KNA a half KHz off frequency, you must clear the RIT before sending TU, or wait until the relay drops afterward. If you're like me, you'd rather rezero the RIT while the memory keyer is sending and be ready to write when the relay drops.

The TS930S does not have an IF shift control. It has been designed so that the IF shift tracks with the VBT as it is tightened.

Continued on page 2

#### DX news

Ten meters had good European and African openings during the weekend of February 26-27, with one of the more notable surprises being **9U5JM**, who held a mammoth pileup on 28620 for about two hours until he shut down at 20z. Unfortunately, conditions won't be so good March 5-6 for the ARRL phone (see N4XX forecast). **Peter & Paul Rocks** should be on March 4-8, courtesy of the Cologne DX Group.

And speaking of whom, could that five-day operation around March 22 be **Spratley**? There's a rumor about another one nearby: **Vietnam** perhaps?

On February 11 the Heard Island party was over: the climbers reached the peak of Big Ben, and everyone knew it was time to go home. The VK0CW/VK0HI duo logged some 26,000 QSOs (unverified total) while Jim Smith reported February 17 that his group had made 15,000 contacts. Smith suffered primarily from poor propagation, and VK0CW with equipment problems, especially antenna failures due to bad weather (which on Heard is beyond comprehension). Both groups deserve our thanks and commendations for their herculean labors to give us a very rare contact. K8CW and VK9NS and the others did everything humanly possible to get these operations on and keep them going. And don't forget this: if they had not maintained good control of the pileups, few W6s and W7s would have gotten through. Now, both groups need some green stamps from each of us. It isn't a matter of showing appreciation; both groups are in the red, and we would be remiss in letting them remain so. Study the figures that will be appearing in the weeks ahead, and give what you can where it's needed. VK0CW/ VK0HI cards go to N2DT; VK0JS, VK0SJ and VK0NL QSLs go to HIDXA, Box 90, Norfolk Island, South Pacific 2899

J20Z cards are coming out with an enclosed note from F6ATQ: The J20Z Team is very sorry for the delay it has taken in replying to your QSL. Originally, the J20A QSLs were to be printed by a DX foundation...We finally succeeded in having our QSL printed. We want to single out Bill, N2BIN, for everything he has done....

They are core

Here's someone else who always has good control of the pileup. In case you don't recognize the big guy with the ivory, that's N6NI at 9K2 during last November's CQWW CW test.

Continued on page 2

# **TS930S**

#### Continued from page 1

Whereas with the 830S you could tune in stations calling off frequency with the IF shift, the 930S requires using the RIT, which just isn't the same. The CW pitch control, likewise, is a poor substitute.

Use of the internal automatic antenna tuner with the Alpha 76A gives less drive than bypassing it. If you have an amplifier with a tuned input, don't bother getting the tuner.

CW reception is on LSB and frequency readout is that of your transmitting frequency. The receiver jumps 800 Hz when switching from SSB to CW but the readout doesn't change, not will it change when you key as is the case with the 830S. This amounts to the same system the Drake C-line used. Kenwood says this change was in response to user input.

The VOX relay does not trip when switching in the narrow CW filters (like the 830S) but it does trip when switching modes.

Tuning the rig from 150 KHz to 30 MHz is a series of internal relay clicks as tuned circuits are switched in and out. Some changes have a noticeable effect on receiver performance. Tuning from 499.9 KHz to 500.0 results in about a 20-dB drop in signal strength. (AM broadcast band 500-1500 KHz has 20 dB of attenuation-Ed.)

My rig had a severe signal leakage problem which showed as CW signals appearing faintly on the wrong side of zero-beat. Kenwood tells me this is not normal and they are now realigning the rig. I tried the stock Kenwood 500-Hz CW filters and was disappointed; with the filters switched in and the VBT at minimum bandwidth I found myself instinctively groping for the CW filter switch to get rid of interfering signals, signals which wouldn't be there with the 830S. I hope Kenwood's realignment will take care of this too.

The high and low cut SSB slope tune controls have yet to prove themselves in making an unreadable signal readable. They can make a readable signal more comfortable to listen to, though, by slicing off a bit of your average pigfarmer QRM. These controls work only in SSB and the VBT works only in CW.

On the transmit side, I don't see as much meter deflection as I'm used to on SSB. A little audio tailoring appears necessary. The MC50 overdrives the 930S very easily.

Discounting for the moment the alignment problems I've had, the receiver is noticeably quieter than the TS830S. There is no headphone noise masking weak signals as in the 830S.

The no tuneup feature is great for one who's not used to having it. The internal wattmeter reads an almost too constant 117 watts out on all bands.

Overall, in the CQ WW CW, I missed my old TS830S. Hopefully, some careful realignment and a set of Fox-Tango filters will make me feel better about the TS930S.

(Originally published in the Yankee Clipper Contest Club's newsletter Scuttlebutt)

## Another view

I acquired a TS930S last August and take exception to some of VV's observations. Maybe other 930 users would like to make their thoughts known too. In any event, here are mine.

First, it must be pointed out that many of VV's complaints stem from the transition he has made from an 830 to a 930—two rigs as different as night and day. His comparisons mean little unless you are accustomed to using the 830, which itself has numerous quirks and oddities. The 930 should be put up against the KWM-380 or the Signal/One units.

Certain complaints VV voices about the 930 are valid. The antenna tuner for example: I cannot think of a good reason to buy one. An output impedance of 20-150 ohms isn't enough range, not when you consider that my 930, sans tuner, doesn't even begin reducing output until the SWR reaches 2:1, which translates to a range of 25-100 ohms (I'll probably hear from Kenwood on that).

Other of VV's gripes I had as well—until I got used to the rig, which takes a few months.

I now find the dual VFOs very easy to use, preferable in fact to an external VFO with a readout that's constantly visible. A second readout simply isn't needed. Going from transceive to split—that is, setting up to transmit on a new frequency specified by the DX station—can be done in two seconds, which is adequate for my purposes. As VV says, it's a four-step operation—sync the two VFOs, split them, hit the T-F button and spin the main tuning—but the trick is doing it with one hand, preferably your left, freeing the right for keying or writing.

If a station calls me off frequency I use the RIT, which is an optical encoder like the main tuning. It can go 10 KHz either side and will tune the memories as well.

VV's alignment problem I didn't have. Others did, and I understand Kenwood corrected it.

The stock Kenwood filter set is worth the extra money if you *copy* a fair amount of CW. I have no complaints about mine (500-Hz units for 455 KHz and 8.83 MHz), which has extremely steep skirts, but admittedly I rely on the VBT in the normal course of events. Tuning, I have the VBT at 10-12 o'clock (1000-1500 Hz). For extended periods of copy on one frequency, however, I will switch in the filter set. It's cleaner, with less loss.

K2VV did not mention another selectivity option on the 930—the AF CW filter—which, for me, frequently made the difference whether I could copy Heard or not. This is a great device that's received almost no attention in 930 literature I've seen.

The SSB slope tune on my 930 must be working better than VV's because it can make an unreadable SSB signal readable; the notch filter's 40 dB of attenuation takes care of most CW jamming; the noise blanker really does remove the woodpecker, unless its center frequency is close, and silences virtually all neighborhood noise as well.

I use an MC60A microphone on low impedance (the built-in preamp *off*) and see more deflection on my 2K4 than I did with a TS820, a TS130 and a TS520. Compression sounds just right at 5-7 dB; 10 dB sounds excessive.

According to the meter, the 930 CW output is 120 watts; and it is clean, according to K6KII, who lives less than a mile away. Cliff is northeast, which could wreak havok with me when he puts his KT34XA on the long path. He does manage to peg the 930 s-meter, but I'm able to copy a CW station 3 KHz either side of him. At 7 KHz, I don't even know he's there.

That's posed a problem too. Since getting the 930, there have been several mornings when I thought Cliff overslept, but in reality he was down at 14002 working something I badly needed.

-W6YQ

#### DX news

Continued from page 1

**PY1EFM/PY0, Trindade** is on when his duties with the military permit. Some of his operation has been on a list at 14218 around 2130z. The fact that he speaks little English is given as the reason.

**BY1QH** is expected on soon. **BY1PK** should be back on any time from the new QTH. The tower is up (we have a photo of it) and the signal is expected to be potent.

TT8AD heard February 24 on 21039 at 01z saying he'll be back each Thursday, i.e., March 3, March 10. Legit? Who said it was legit?

ON6BC/C9 21294 at 2015. Documentation? What's that?

**BY8AA** 14018 at 0130...**5R8AL** 21056 1740 QSL WA4VDE... **CP6EL** 3793 0725...**TR8JD** 10102 0330...**5N2LED** 14210 2130...

As we went to press March 1, nothing had been heard from A6 (DJ0WL), S21 (JA8MWU/JH8NYK), 70 (Carl & Martha), VP8 South Georgia (G4DNV), ZA, XU, XV, 4W, CE0X, etc., etc.

(Tks to The DX Bulletin, DX Report, DX News Sheet, The Long Island DX Bulletin, W6RT, N6AHV)

## **Activity reports**

KM6B: CT2CB 3784 0833, LA9ZV 7079 1437, UA6RB 7080 1453, W6KG/A7 14202 1526, 7Z2AP 14212 1549 (Jan 21); FY7AN 3791 0551, FO8FO 3777 0656, 6W8DY 3788 0755, ZK2RS 3791 0804, JY9RC 7079 1444, 3A2LF 14215 1520 (Jan 22); 5N8ARY 14213 1635 (Jan 23); ZS6WD 3793 0412, CT3BM 3796 0750 (Jan 24); TT8BC 14214 0038, SM5API 3788 1452 (Jan 28); ZD7BW 21275 2204 (Jan 31); LU5ZA 7085 0659, FK8CR 3796 0909 (Feb 1); VK0HI 14197 1501, DF3NZ/ST2 14205 1512, GW3NNF 28523 1727 (Feb 2); CP1JB 3796 0454, CE3DNP 3791 0802, ZK1DA 3800 1421 (Feb 5); LZ1KSA 3792 0337, YU3TVI 3794 0411, D44BC 3792 0639 (Feb 6); HP3FL 3792 1108, HH2SD 3796 1117 (Feb 8); PJ9EE 3798 0628 (Feb 9); HK5BCZ 3795 0722, A71AD 3777 1435 (Feb 11); KG4CD 3796 0300, VK0JS 14197 0534, HK5BCZ 3800 0743, 9N1WW 3800 1433, UA0FCL 3645 1448, 5D1BBG 3795 1531 (Feb 12); LU5ZA 3744 0611, G4LJF/3B8 3794 1429, FB8ZQ 3794 1521 (Feb 13); W9NXD/HR2 3789 0511, **5T5TO** 3798 0600, **3D6AK** 7076 1531, EK9C/O 14214 1745, YK1SO 14206 1510 (Feb

**N6AW:** JY9RC 7082 1456, DF3NZ/ST2 14205 1509 (Feb 3); JT0LAJ 7079 1445 (Feb 4); SU1ER 14279 1524 (Feb 9); 5Z4WL 7001 1530 (Feb 15); UG6GBD 7002 1457, A4XJO 7003 1515 (Feb 16); 3D6AK 7073 1517 (Feb 18); FR0FLO 7082 1456 (Feb 22); UF6FHW 7001 1436, ST2SA 14215 1501, YB0ACP 7072 1506, VS6CT 7074 1521, A71AD 7060 1529 (Feb 25).

**W6BWG:** LU5ZA 21294 0024, VR6TC 21349 0054, FY7BW 28509 2141 (Feb 2); LU3ZI 14213 0234 (Feb 6); 5N2LED 14210 2151 (Feb 9); VK0JS 14194 0142, EK9C/0 14224 1716, T30DB 21292 2146 (Feb 11); 5N8ARY 14204 2259 (Feb 13); EA8ADP 21355 1936, ZD9YL 14209 2217 (Feb 18); UC2OBP 14224 1700 (Feb 25).

**W6RT:** UL7PBE 7001 0220, OH1PS 7002 0625 (Jan 22); **EK9D/0** 14211 1742 (Jan 23); **VQ9CW** 7004 0059 (Jan 25); **LU5ZA** 14195 0101, **VK0CW** 14020 0457 (Jan 28).



## Bulletin

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Editor Mike Hudgens, W6YQ

Associate editors Jan Perkins, N6AW Stan Brokl, N2YQ Dick Emrich, NN6U

Send material for this bulletin to Mike Hudgens, W6YQ, 10103 Lynrose, Temple City, CA 91780.

## Minutes of the last meeting

By Jan Perkins, N6AW Secretary, SCDXC

The meeting was called to order at 8 PM by Neil Kaltman, K6SMF, SCDXC president. A moment of silence was observed for W6IR, who became a silent key on December 28, 1982.

Cleyon, AD6P, advised that the repeater will be moving to K6SVL's Palos Verdes location. John is up the hill 800 feet above sea level and has a clear shot to the north.

Hugh Allen Jr., W6MFC, was announced as the awards manager for the SCDXC. He will be assisted by N6AW in preparing club awards. A certificate was presented to John, WA6LOD, for his portable AH2 operation in Guam.

An update on the Buena Park TVI problem was given by Art, W6EA. It seems an aquarium pump was the culprit. Efforts in that city have also resulted in eliminating the \$475 fee for antenna approval.

Irv, W6GC, has been selected to represent the Los Angeles County Affiliated Radio Clubs for the Olympics. He will coordinate the communications support provided by the clubs.

April 22-24, Neil reminded us, are the days of the International DX Convention in Visalia. Make your reservations early and contact the Visalia Holiday Inn directly.

Our scheduled speaker, ZK1CG, took a wrong turn on the way to the meeting and was stranded in Glendale. After some hasty discussions, Joe, K5KT/6, arranged for an impromptu talk by three members. Bill Mauzey, W6RT, described his early days on 40 meters, bringing us up to his present station and current operation on that band. Jan, N6AW, and Jim, KM6B, each covered day-to-day characteristics and difficulties encountered on 40 meters.

The drawing for prizes was then held: Palomar noise bridge (AB6R), Curtis K5B keyer (W6PMT), ARRL Handbook (KX6MY), Drake high pass filter TV300HP (N6HL), Hints & Kinks (W6PQZ), Solid State Design for Radio Amateurs (KM6B), Radio Frequency Interference (W6PMT), The W6SAI Antenna Handbook (NC6H), Radio Propagation Handbook (N6FKA), How to Build Hidden Limited-Space Antennas that Work (N6HL), All About Cubical Quad Antennas (W6MX), and Interference Handbook (NN6U).

Club news

Meeting February 24, the SCDXC board of directors made the following recommendations to be voted on March 10 by the membership:

☐ That, given the growing importance of the AD6P repeater to club members, the repeater no longer be supported by contributions, the repeater fund to be made an integral part of the SCDXC budget;

□ That an excellent site, details of which will be given at the March 10 meeting, be accepted by the membership and supported by club dues (cost would be \$75-\$100 a month).

In a related issue, the board voted that a 20-second timer be tried on the repeater during peak DX periods around sunrise and sunset.

The following recommendation was made regarding the recent expeditions to Heard Island: that, based on the amount of time spent on the island, \$400 be donated to the IDXF group, \$200 to the Jim Smith group.

New members for February, reports membership chairman Bob Cobb, W6CN, are Bill Stokes, N6AFN; Philip Finkle, K6EID; Roy Zukerman, AC6H; Don Moe, KE6MN; Sidney Kleiger, NQ6N; Ted Samples, W6SRP. Of these, NQ6N joins us as an associate member. Charles Blanchard, KD6DJ, and George Duvall, N6DJY, have upgraded have upgraded to full membership. Al Yerkes, longtime member and Thursday night Roundtable MC is now NS6B, formerly WB6WSD. NS6C is James Sullivan, ex-K6YCM. Gerald Strauss, ex-KB6BP, is NO6H. The club phone directory will be coming out this spring and W6CN needs your updated information.

Henry Folkerts, WA6QGC, ex-7Z3AB, will be aboard a Scripps Institute ship operating /mm March 20-May 11.

The Old Spaghetti Factory at 5939 Sunset is going to be the site of the May meeting.

Don't forget visitor's day this year the the W6AM Rhombic Farm: it's Sunday, June 12, 1-5 PM. Directions in a later issue.

Pre-registration cutoff date for Visalia—held this year April 22-24—is March 15. Register now: \$40 covers program sessions, Saturday banquet, Sunday breakfast and prizes. Write NCDXC, Box 608, Menlo Park 94025. For room reservations write or call Holiday Inn-Visalia Airport, 9000 Airport Drive, Visalia 93277. The telephone number is (209) 651-5000.

Volunteers are needed to furnish transportation for convention speakers from LAX to Visalia.

Dates for the 1984 convention, which SCDXC will host, have been set: April 13.15

Please pay your \$12 yearly dues by March 31; otherwise, you'll be delinquent (see Article I, Sec. 7 of the club by-laws). The mailing label on your March and April Bulletins will be marked with a red dot, along with the notation that on May 2 you'll be dropped from the roster. Send your dues to our treasurer, **Don Moses**, W6UY, 5618 Scotwood Drive, Palos Verdes Peninsula 90274. Membership cards, by the way, no longer are available because of the size of the club and printing costs.

Don reports that as of February 24 we had cash on hand in the amount of \$5246 and \$277 in the repeater fund. The February door prize cost \$154, \$145 of which was offset by ticket sales.

We have learned that Charles Sheetz, W6IR, is a silent key.

Michael Hudgens, W6YQ 10103 Lynrose Street Temple City, CA 91780





#### Club members on Honor Roll

Mixed

\$\text{353}\, \text{JA1BK}\ (348)\, \text{W6RT}\ (358)\, \text{W6ET}\ (353)\, \text{JA1BK}\ (348)\, \text{W6REH}\ (347)\, \text{OH2BH}\ (343)\, \text{N6AV}\ (342)\, \text{K6YRA}\ (341)\, \text{W6EUF}\ (340)\, \text{\$\text{\$\sigma}\frac{1}{2}\text{W6EE}\ (361)\, \text{K6DJ}\ (360)\, \text{W6BA}\ (355)\, \text{W6EV}\ (346)\, \text{W6FW}\ (344)\, \text{SMFW}\ (344)\, \text{N6AR}\ (343)\, \text{N6GM}\ (342)\, \text{K6QH}\ (339)\, \text{W7AO}\ (353)\, \text{N6UC}\ (331)\, \text{\$\text{\$\sigma}\frac{1}{2}\text{\$\text{\$\sigma}\frac{1}{2}\text{\text{\$\sigma}\frac{1}\text{\text{\$\sigma}\frac

#### Phone

CW

300: WA6TLA (302).

# Letters

Editor-

I am very pleased to be made an Honorary Life Member. Thanks and 73 to all.

O.J. Mills, KN6N, ex-W6CYI

#### Contest calendar

March 5	5-6	ARRL	DX Phone
March 1	19-20	Bermuc	la Contest
March 2	26-27	CQ WW W	PX Phone
May 28-	-29	_ CQ WW	WPX CW
			-W1WY

## Classified

CUSTOMIZED QSLs by W6BA, \$19.75 for 1000 plus shipping. No standard forms. We try to print what you want. Black ink on color 110-pound stock. Write for samples. Bill Adams, W6BA; Star Route 2, 29 Palms, CA 92277.

SB300, SB400: \$250; Henry 2K-D: \$400. Bill, W6RT (213) 553-5370.

### State of the bands

Springtime conditions are becoming more apparent as our sunrise begins earlier. Long path openings will keep getting later with weaker signals.

Ten meters has suffered with declining sunspot activity. Best bet for Europe is around 16z and Africa from 16-20z. JAs are heard from 21z and SE Asia from 01z. About 03z, look for zones 17 and 22.

Fifteen meters will be similar to ten with longer European openings and Africans occasionally heard until our sunset. Scandinavians will be heard sometimes on the JA path about 01-02z.

Twenty long path is a bit later, about 15z, with more Europeans and weaker Mideast



stations. The SE Asia area will be very strong at the same time. Look for Africa at our sunset and Europeans short path a bit later.

Thirty meters is the best of forty and twenty combined. Daylight DX, long path in the mornings, Africa at sunset and no broadcast QRM. Most DX seems to be about the bottom 3 or 4 KHz.

Forty long path is still going strong. Mideast stations peak about 1515z and are heard until 1545z. SE Asia and JA are very strong at this time. Zone 23 peaks right at sunrise (1435z now). Africa LP from 1430-16z and short path around sunset (02z) for several hours has been consistent. Europe short path about 05-07z is weak but there.

Eighty long path at sunrise to Europe and the Mideast has been consistent. The DX comes out of the noise for 7 or 8 minutes during their sunset. Africans can be heard short path from sunset for several hours.

-N6AW

## **N4XX** propagation

A, H, L, B, D-Above, High, Low, Below, Disturbed

3	D	10	L	17	L	24	H/L	29	A/D
4	D	11	D	18	H*	25	H	30	D
5	D	12	B/D	19	L	26	H	31	D
-	D	13	В	20	L	27	H	1	D
	L	14	В	21	L	28	A	2	D
-		15	В	22	Н	1		3	L
8	H/L		-			"Re	gins		
9	В	16	L	23	H/A	54-0	lav fore	ecast	